

State of Hawaii  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
Division of Aquatic Resources  
Honolulu, Hawaii 96813

August 12, 2011

Board of Land  
and Natural Resources  
Honolulu, Hawaii

Request for Authorization and Approval to Issue a Papahānaumokuākea Marine National  
Monument Education Permit to Dr. Andrew Rossiter, University of Hawaii, Waikiki Aquarium,  
for Access to State Waters to Conduct Coral and Fish Collection Activities

The Division of Aquatic Resources (DAR) hereby submits a request for your authorization and approval for issuance of a Papahānaumokuākea Marine National Monument education permit to Dr. Andrew Rossiter, Director, Waikiki Aquarium, pursuant to § 187A-6, Hawaii Revised Statutes (HRS), chapter 13-60.5, Hawaii Administrative Rules (HAR), and all other applicable laws and regulations.

The education permit, as described below, would allow entry and activities to occur in Papahānaumokuākea Marine National Monument (Monument), including the NWHI State Marine Refuge and the waters (0-3 nautical miles) surrounding the following sites:

- Nihoa Island
- Necker Island (Mokumanamana)
- French Frigate Shoals
- Gardner Pinnacles
- Maro Reef
- Laysan Island
- Lisianski Island
- Pearl and Hermes Atoll
- Kure Atoll

The activities covered under this permit would occur between August 25, 2011 and December 31, 2011.

The proposed activities are largely a renewal of work previously permitted and conducted in the Monument.

INTENDED ACTIVITIES

The Applicant proposes to collect and remove live coral and fish from Papahānaumokuākea Marine National Monument, for the purpose of being maintained and put on public display in a new exhibit at the Waikiki Aquarium highlighting the fauna and ecosystem of the Northwestern

Hawaiian Islands. In addition, some specimens may be housed in an educational display at the NOAA Mokupapapa Discovery Center in Hilo.

Target species are those which are uncommon or absent from the Main Hawaiian Islands, and include:

Coral

Table Coral  
Fuzzy Table Coral  
Staghorn Coral  
Bushy Staghorn Coral  
Branching Staghorn Coral  
Rice Coral  
Lumpy Rice Coral  
Hawaiian Rice Coral  
Stellar Coral  
Spotted Coral  
Bewick Coral  
Crust Coral  
Pocillopora sp.

Fish

Hawaiian Morwong  
Sling Jaw Wrasse  
Thompson's Anthias  
Elegant Anthias  
Bicolor Anthias  
Bearded Armorhead  
Chevron Butterflyfish  
Tinker's Butterflyfish  
Orangemargin Butterflyfish  
Nahacky's Angelfish  
Barred Knifejaw  
Crosshatch Triggerfish

The proposed activities are a continuation of previously permitted and conducted work and as such the requested collection amounts per species have declined since last year. As with many projects in the Monument, multiple trips may be necessary to complete collections

For coral, the applicant proposes to collect 3-5 specimens depending on each species, except for *Acropora cerealis* for which 10 specimens are requested. In addition, the applicant requests to collect up to 5 voucher specimens of any unknown coral species encountered. The priority would be to collect small (5-15cm) naturally dislodged coral fragments of these corals, with fragments of intact colonies being used only as a last resort. Only corals exhibiting excellent health characteristics would be collected.

For fish, the applicant proposes to collect 2-6 specimens of each species, except for Thompson's Anthias for which 20 specimens are requested. Collection would be via hand-nets, barrier nets, small hand-lines, fish keeps, and/or various collection containers and bags. The priority would be to collect fish from less than 70ft of depth to minimize the chance of barotraumas.

Extreme care would be taken to follow the protocols established by the applicant and Monument staff concerning the collection, packing, transport and maintenance of live coral and fish (see F-3d). Coral and fish collections would either be conducted by Waikiki Aquarium staff or opportunistically by divers already accessing the Monument under other permits, such as Randy Kosaki and Daniel Wagner from NOAA, Richard Pile from the BP Bishop Museum, and Anthony Montgomery of USFWS.

Because the Northwestern Hawaiian Islands are not easily accessible to the public, the Waikiki Aquarium's new 5,000 gallon display would help introduce the Monument to the public and stimulate an interest and appreciation for its significance and importance.

The activities proposed by the applicant directly support the Monument Management Plan's action plan 3.5.4 – Ocean Ecosystems Literacy (through strategy OEL-2: Develop and implement new tools to “bring the place to the people”, with focus on students, within 3 years).

The activities described above may require the following regulated activities to occur in State waters:

- ☒ Removing, moving, taking, harvesting, possessing, injuring, disturbing, or damaging any living or nonliving monument resource
- ☒ Touching coral, living or dead
- ☒ Swimming, snorkeling, or closed or open circuit SCUBA diving within any Special Preservation Area or Midway Atoll Special Management Area

### REVIEW PROCESS

The permit application was sent out for review and comment to the following scientific and cultural entities: Hawaii Division of Aquatic Resources, Hawaii Division of Forestry and Wildlife, Papahānaumokuākea Marine National Monument (NOAA/NOS), NOAA Pacific Islands Regional Office (NOAA-PIRO), United States Fish and Wildlife Service Hawaiian and Pacific Islands National Wildlife Refuge Complex Office, and the Office of Hawaiian Affairs (OHA). In addition, the permit application has been posted on the Monument Web site since March 10th, giving the public an opportunity to comment. The application was posted within 40 days of its receipt, in accordance with the Monument's Public Notification Policy.

### **Comments received from the scientific community are summarized as follows:**

Scientific reviews support the acceptance of this application. The following questions were raised and addressed by the Applicant.

- 1. Why do you need to collect corals common in the Main Hawaiian Islands from Papahānaumokuākea?*

The Applicant states that the corals listed in the permit application are either not found in the MHI, or are not found in abundance in the MHI, hence the reason for their inclusion in the PMNM permit application. Much like the fish on the PMNM collection list, there are some species which can be found in the MHI, but their collection may lead to extirpation from that

entire environment or ecosystem, whereas the collection of a few specimens from the PMNM would leave that environment largely unchanged.

The "overall species list" for the Waikiki Aquarium exhibit does include animals common to the MHI, because there are many corals found in both the MHI and PMNM...while the "PMNM collection list" targets fish and corals which are more difficult to find in the MHI but are abundant up in the NWHI. If there are questions/concerns about the individual species on the PMNM collection list for our permit application, please don't hesitate to contact me or Dr. Rossiter and we will try to clear these up as best as possible.

*2. Can you clarify what the quantitative threshold of specimen abundance you will use for voucher specimen collections?*

The Applicant proposes the same quantitative threshold of specimen abundance for voucher specimen collection as given in last year's approved permit. The following were the guidelines as given by the MMB:

"For clonal organisms that cannot be visually identified or may represent a new geographic record or new species, take shall be limited to no more than half the clonal organism visually observed. Up to three (3) clonal specimens of similar morphology can be taken, removed, or possessed if an abundance assessment of ten (10) or more of such specimens is ascertained, cumulative during course of dive."

**Comments received from the Native Hawaiian community are summarized as follows:**

Cultural reviews support the acceptance of this application.

**Comments received from the public are summarized as follows:**

No comments were received from the public on this application.

**Additional reviews and permit history:**

Are there other relevant/necessary permits or environmental reviews that have or will be issued with regard to this project? (e.g. MMPA, ESA, EA) Yes ☒ No ☐

If so, please list or explain:

- The proposed activities are in compliance with the National Environmental Policy Act.
- The Department has made an exemption determination for this permit in accordance chapter 343, HRS, and Chapter 11-200, HAR. See Attachment ("DECLARATION OF EXEMPTION FROM THE PREPARATION OF AN ENVIRONMENTAL ASSESSMENT UNDER THE AUTHORITY OF CHAPTER 343, HRS AND CHAPTER 11-200 HAR, FOR PAPA HANAUMOKU AKEA MARINE NATIONAL MONUMENT RESEARCH PERMIT TO DR. ANDREW ROSSITER, WAIKIKI AQUARIUM, FOR ACCESS TO STATE WATERS TO CONDUCT CORAL AND FISH COLLECTION ACTIVITIES UNDER PERMIT PMNM-2011-026")

Has Applicant been granted a permit from the State in the past? Yes ☒ No ☐

If so, please summarize past permits:

- The applicant was granted permit PMNM-2009-031 and PMNM-2010-023 to conduct similar work in both 2009 and 2010 respectively.

Have there been any a) violations: Yes ☐ No ☒  
b) Late/incomplete post-activity reports: Yes ☐ No ☒

Are there any other relevant concerns from previous permits? Yes ☐ No ☒

### STAFF OPINION

DAR staff is of the opinion that Applicant has properly demonstrated valid justifications for his application and should be allowed to enter the NWHI State waters and to conduct the activities therein as specified in the application with certain special instructions and conditions, which are in addition to the Papahānaumokuākea Marine National Monument Education Permit General Conditions. All suggested special conditions have been vetted through the legal counsel of the Co-Trustee agencies (see Recommendation section).

### MONUMENT MANAGEMENT BOARD OPINION

The MMB is of the opinion that the Applicant has met the findings of Presidential Proclamation 8031 and this activity may be conducted subject to completion of all compliance requirements. The MMB concurs with the special conditions recommended by DAR staff.

### RECOMMENDATION


Based on the attached proposed declaration of exemption prepared by the department after consultation with and advice of those having jurisdiction and expertise for the proposed permit actions:

1. That the Board declare that the actions which are anticipated to be undertaken under this permit will have little or no significant effect on the environment and is therefore exempt from the preparation of an environmental assessment.
2. Upon the finding and adoption of the department's analysis by the Board, that the Board delegate and authorize the Chairperson to sign the declaration of exemption for purposes of recordkeeping requirements of chapter 343, HRS, and chapter 11-200, HAR.
3. That the Board authorize and approve an Education Permit to Dr. Andrew Rossiter, Waikiki Aquarium, with the following special conditions:
  - a. This permit is not to be used for nor does it authorize the sale of collected organisms. Under this permit, the authorized activities must be for noncommercial purposes not involving the use or sale of any organism, by-products, or materials collected within the Monument for obtaining patent or intellectual property rights.
  - b. The permittee may not convey, transfer, or distribute, in any fashion (including, but not limited to, selling, trading, giving, or loaning) any coral, live rock, or


organism collected under this permit without the express written permission of the Co-Trustees.

- c. To prevent introduction of disease or the unintended transport of live organisms, the permittee must comply with the disease and transport protocol attached to this permit.
- d. Tenders and small vessels must be equipped with engines that meet EPA emissions requirements.
- e. Refueling of tenders and all small vessels must be done at the support ships and outside the confines of lagoons or near-shore waters in the State Marine Refuge.

Respectfully submitted,

  
FR Administrator

APPROVED FOR SUBMITTAL

  
for William J. Aila, Jr.  
Chairperson

**Papahānaumokuākea Marine National Monument**  
EDUCATION Permit Application

**NOTE:** *This Permit Application (and associated Instructions) are to propose activities to be conducted in the Papahānaumokuākea Marine National Monument. The Co-Trustees are required to determine that issuing the requested permit is compatible with the findings of Presidential Proclamation 8031. Within this Application, provide all information that you believe will assist the Co-Trustees in determining how your proposed activities are compatible with the conservation and management of the natural, historic, and cultural resources of the Papahānaumokuākea Marine National Monument (Monument).*

**ADDITIONAL IMPORTANT INFORMATION:**

- Any or all of the information within this application may be posted to the Monument website informing the public on projects proposed to occur in the Monument.
- In addition to the permit application, the Applicant must either download the Monument Compliance Information Sheet from the Monument website OR request a hard copy from the Monument Permit Coordinator (contact information below). The Monument Compliance Information Sheet must be submitted to the Monument Permit Coordinator after initial application consultation.
- Issuance of a Monument permit is dependent upon the completion and review of the application and Compliance Information Sheet.

**INCOMPLETE APPLICATIONS WILL NOT BE CONSIDERED**

Send Permit Applications to:

Papahānaumokuākea Marine National Monument Permit Coordinator  
6600 Kalaniana'ole Hwy. # 300  
Honolulu, HI 96825  
nwhipermit@noaa.gov  
PHONE: (808) 397-2660 FAX: (808) 397-2662

**SUBMITTAL VIA ELECTRONIC MAIL IS PREFERRED BUT NOT REQUIRED. FOR  
ADDITIONAL SUBMITTAL INSTRUCTIONS, SEE THE LAST PAGE.**

## **Papahānaumokuākea Marine National Monument Permit Application Cover Sheet**

This Permit Application Cover Sheet is intended to provide summary information and status to the public on permit applications for activities proposed to be conducted in the Papahānaumokuākea Marine National Monument. While a permit application has been received, it has not been fully reviewed nor approved by the Monument Management Board to date. The Monument permit process also ensures that all environmental reviews are conducted prior to the issuance of a Monument permit.

### **Summary Information**

**Applicant Name:** Dr. Andrew Rossiter: Director, Waikiki Aquarium

**Affiliation:** Waikiki Aquarium, and Department of Zoology, University of Hawaii at Manoa

**Permit Category:** Education

**Proposed Activity Dates:** April 1, 2011 - December 31, 2011

**Proposed Method of Entry (Vessel/Plane):** Vessel and Plane

**Proposed Locations:** Nihoa Island, Mokumanamana, French Frigate Shoals, Gardner Pinnacles, Maro Reef, Laysan Island, Lisianski Island, Neva Shoal, Pearl and Hermes Atoll, Midway Atoll, and Kure Atoll

**Estimated number of individuals (including Applicant) to be covered under this permit:**

(10) ten, but most likely no more than (8) eight on any one trip

**Estimated number of days in the Monument:**

Estimated maximum of (3) three separate trips covering approximately (30) thirty days each, for a total of 90 days

**Description of proposed activities:** (complete these sentences):

a.) The proposed activity would...  
involve the collection and removal of a limited number of target live fishes and corals from the Papahānaumokuākea Marine National Monument. These specimens will be collected with extreme care by trained and highly experienced professional biologists. Accidental by-catch and incidental mortalities will be avoided by targeting select specimens, and extreme care will be taken to not damage the habitat. It is the goal of the Waikiki Aquarium staff or other designees to collect specimens and return them alive and in good condition to the Waikiki Aquarium, where they will be maintained and put on public display in a new exhibit highlighting the fauna and ecosystem of the Papahānaumokuākea Marine National Monument.

b.) To accomplish this activity we would ....  
use SCUBA and snorkeling techniques within the Papahānaumokuākea Marine National Monument, specifically around the islands of Midway Atoll, French Frigate Shoals, Maro Reef,



and Pearl and Hermes Atoll, but also including other islands/reefs within the Monument. A small boat or vessel may be used to reach those few collecting sites where shore access is not possible.

The target organisms will be collected by trained and experienced biologists using non-destructive and non-lethal collecting methods, namely handnets, barrier nets, geological picks, small hand tools, fishkeeps and other small collection containers. Specimens will be targeted individually to avoid the accidental capture or incidental mortality of unwanted specimens that can occur during non-targeted netting activities.

For fishes, to minimize post capture trauma, emphasis will be placed on collecting smaller, juvenile specimens so as to avoid the stress-related issues that sometimes occur with larger specimens during transportation and introduction to captivity. Additionally, this protocol aims to, whenever possible, avoid the removal of larger, reproductively mature animals from the population.

For corals, priority will be given to collecting fragments which have become detached naturally from parent colonies. Fragmentation of intact colonies will be undertaken as a last resort only when naturally occurring fragments are not plentiful or available, and will be done with utmost care so as to minimize impact to the parent colony. Waikiki Aquarium biologists and their designees are highly experienced and extremely competent in this procedure and any deleterious effects from sampling will be minimal and short lived. For example, in the 2009 sampling for this project, the small scars left when fragments were removed from a parent colony had completely healed over three weeks later.

c.) This activity would help the Monument by ...  
presenting to our 320,000 visitors annually, a living reef habitat representative of that found in the Monument. Viewing this ecologically accurate exhibit and associated graphic and video educational messaging will result in increased public awareness of the Monument. Furthermore, it will also give rise to an improved understanding of the unique nature of the marine faunas found there, and why it is so important to preserve and protect them. Additionally, our education programs, which reach over 32,000 schoolchildren annually, will be revised to incorporate accurate scientific and cultural information about the Monument, using the exhibit as a dynamic living tool to underline the education and conservation message.

**Other information or background:**

The Waikiki Aquarium has a long and successful history in maintaining, breeding, and propagating both local and non-local species of marine fishes and invertebrates. This includes uncommon and previously described "hard to keep" species, endangered species, and Species of Concern. The Aquarium is internationally renowned for its pioneering and successful programs in this area and holds many records for 'firsts' in public exhibiting or breeding of species, any many records for longevity in captivity. For example, it was the first aquarium within the United States, and second worldwide, to successfully breed the Chambered Nautilus, and continues to breed these animals to this day. One of the signature fish species which we have applied to

collect under this permit, the Masked Angelfish *Genicanthus personatus*, has only been bred in captivity at the Waikiki Aquarium. Currently, species such as the irregular rice coral *Montipora dilatata*, one of four federally recognised Species of Concern in Hawaii (Kaneohe Bay, Oahu) and *Acropora cytherea* (Kauai) are currently being successfully grown and propagated as part of this program. Our trip to French Frigate Shoals in 2009, and again last October 2010, resulted in the collection and current successful maintenance of one undescribed *Acropora* species according to personal communications with USFWS Coral Reef Biologist, Dr. James Maragos. Many other examples of the Aquarium's achievements exist, and the Aquarium continues to be at the forefront in maintaining successfully, exhibiting or breeding newly discovered, hard to find, and challenging species.

## **Section A - Applicant Information**

### **1. Applicant**

Name (last, first, middle initial): Rossiter-Ph.D, Andrew

Title: Director, Waikiki Aquarium

#### **1a. Intended field Principal Investigator (See instructions for more information):**

Richard L. Klobuchar, Jr.

University of Hawaii (Manoa)/Waikiki Aquarium

Aquarium Biologist/Research Support/Scientific Diver

#### **2. Mailing address (street/P.O. box, city, state, country, zip):**

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

For students, major professor's name, telephone and email address:

#### **3. Affiliation (institution/agency/organization directly related to the proposed project):**

University of Hawaii (Manoa)/Waikiki Aquarium

NOAA

#### **4. Additional persons to be covered by permit. List all personnel roles and names (if known at time of application) here (e.g. John Doe, Teacher; Jane Doe, Videographer):**

Norton Chan-Aquarium Biologist II/Scientific Diver, UH Manoa, Waikiki Aquarium; Additional Waikiki Aquarium Biologist(s)/Scientific Diver(s) (TBD); Additional Collection Divers (TBD)



## **Section B: Project Information**

### **5a. Project location(s):**

<input checked="" type="checkbox"/> Nihoa Island	<input type="checkbox"/> Land-based	<input checked="" type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input checked="" type="checkbox"/> Necker Island (Mokumanamana)	<input type="checkbox"/> Land-based	<input checked="" type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input checked="" type="checkbox"/> French Frigate Shoals	<input type="checkbox"/> Land-based	<input checked="" type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input checked="" type="checkbox"/> Gardner Pinnacles	<input type="checkbox"/> Land-based	<input checked="" type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input checked="" type="checkbox"/> Maro Reef			
<input checked="" type="checkbox"/> Laysan Island	<input type="checkbox"/> Land-based	<input checked="" type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input checked="" type="checkbox"/> Lisianski Island, Neva Shoal	<input type="checkbox"/> Land-based	<input checked="" type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input checked="" type="checkbox"/> Pearl and Hermes Atoll	<input type="checkbox"/> Land-based	<input checked="" type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input checked="" type="checkbox"/> Midway Atoll	<input checked="" type="checkbox"/> Land-based	<input checked="" type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input checked="" type="checkbox"/> Kure Atoll	<input type="checkbox"/> Land-based	<input checked="" type="checkbox"/> Shallow water	<input type="checkbox"/> Deep water
<input checked="" type="checkbox"/> Other			

NOTE: There is a fee schedule for people visiting Midway Atoll National Wildlife Refuge via vessel and aircraft.

### **Location Description:**

Waikiki Aquarium staff and their TBD designees will conduct SCUBA/snorkeling activities in various marine habitats from intertidal to <50 meters depth around the various project locations. Collaborative collecting efforts with additional Bishop Museum, FWS, NOAA staff, and other TBD collectors, may be necessary around the islands of the Monument to obtain certain specimens which were not found by Waikiki Aquarium staff.

### **5b. Check all applicable regulated activities proposed to be conducted in the Monument:**

- ☒ Removing, moving, taking, harvesting, possessing, injuring, disturbing, or damaging any living or nonliving Monument resource
- ☐ Drilling into, dredging, or otherwise altering the submerged lands other than by anchoring a vessel; or constructing, placing, or abandoning any structure, material, or other matter on the submerged lands
- ☒ Anchoring a vessel
- ☐ Deserting a vessel aground, at anchor, or adrift
- ☐ Discharging or depositing any material or matter into the Monument
- ☒ Touching coral, living or dead
- ☐ Possessing fishing gear except when stowed and not available for immediate use during passage without interruption through the Monument
- ☐ Attracting any living Monument resource
- ☐ Sustenance fishing (Federal waters only, outside of Special Preservation Areas, Ecological Reserves and Special Management Areas)
- ☐ Subsistence fishing (State waters only)
- ☒ Swimming, snorkeling, or closed or open circuit SCUBA diving within any Special Preservation Area or Midway Atoll Special Management Area

**6 Purpose/Need/Scope *State purpose of proposed activities:***

The Papahānaumokuākea Marine National Monument is the largest single area dedicated to conservation in the United States and is home to more than 7,000 marine species, a quarter of which are found nowhere else on Earth. The region holds the largest, healthiest, and most pristine coral reef system in the United States.

Its geographic remoteness and restrictions on public access mean that most people in their lifetime will not be able to visit the Papahānaumokuākea National Monument, and so will be unable to gain an appreciation for our country's largest Marine National Monument. Through its new 5,000 gallon public display, the Waikiki Aquarium seeks to introduce the Monument to the public and stimulate an interest and appreciation for its significance and importance. Additionally, graphic and video formats will provide educational and conservational messaging dedicated to the Monument ecosystem.

To create an exhibit that represents the Monument accurately and distinguishes it clearly from existing Aquarium exhibits that represent other Hawaiian ecosystems, certain signature species of fishes and invertebrates will need to be collected and transported back to the Waikiki Aquarium for public display and propagation. These signature species are highly abundant around the NWHI, but are limited in numbers or totally absent around the Main Hawaiian Islands. As such, removal of a few specimens of these species from the Main Hawaiian Islands may mean extirpation from that habitat. In contrast, the collection of a limited number of specimens of these target species from the NWHI where they are abundant would be insignificant. It is on this reasoning that our request to collect from the NWHI is based.

**7. Answer the Findings below by providing information that you believe will assist the Co-Trustees in determining how your proposed activities are compatible with the conservation and management of the natural, historic, and cultural resources of the Monument:**

The Findings are as follows:

a. How can the activity be conducted with adequate safeguards for the cultural, natural and historic resources and ecological integrity of the Monument?

This activity will be conducted in a manner that does not impinge upon the cultural, natural and historical resources and ecological integrity of the Monument. Ultimately, this project will result in an increased attention and appreciation toward the cultural and natural resources and ecological integrity of the Monument. The living organisms collected during this activity will be displayed at the Waikiki Aquarium in the largest NWHI exhibit in the world. In addition to experiencing a living visual underwater image of the Monument through this exhibit, guests will be presented with educational graphics and video presentations that discuss the resources and importance of the Monument.

The activities of the Aquarium are centered around education, conservation and research, and it is our goal to promote the cultural and natural resources and ecological aspects of the NWHI, and not detract from them. Of particular relevance in regard is our sampling time frame and

ecologically sensitive protocols. Sampling will last no longer than is necessary to collect the desired species. Non-lethal and non-destructive capture methods will be used to ensure that only the targeted organisms are collected, and that these are treated with the greatest care possible. Care will be taken to ensure that the environment they are removed from is not harmed in the process. Shore-based dives and snorkeling will be used preferentially whenever possible, to prevent any additional disturbance that may be caused by a small boat/vessel and to reduce the amount of additional resources that would be used. Only specimens which are easily replaced or can regrow in a minimal amount of time will be collected. Wherever possible, juvenile fishes will be collected, thereby avoiding the removal of larger, sexually mature specimens which help repopulate the reefs. Collected coral fragments will preferentially consist of naturally detached fragments; only if these are unavailable will small fragments be removed directly from parent colonies. Should fragment removal be necessary, it will be done in a manner that will not affect the long-term growth or wellbeing of the coral: Waikiki Aquarium biologists are highly experienced and very successful in this technique. If coral fragments are taken directly from parent colonies, to minimize collection pressure on any single colony, several different colonies will be sampled. No activities will be performed in the vicinity of known shipwrecks or other cultural resources. If and such resources are discovered during the course of our activities, their location(s) will be noted and reported back to the Monument. Collection activities will cease immediately, and will be moved to another location.

b. How will the activity be conducted in a manner compatible with the management direction of this proclamation, considering the extent to which the conduct of the activity may diminish or enhance Monument cultural, natural and historic resources, qualities, and ecological integrity, any indirect, secondary, or cumulative effects of the activity, and the duration of such effects? Only the minimum number of target organisms (i.e. fishes and corals) necessary to achieve our goals will be removed, and no other organisms will be damaged or collected. Together with the careful, precise and ecologically-sensitive collection methods used by the experienced biologists involved, these actions will ensure that any short term impact of removal will be minimal, and that long term impact will be undetectable. For example, in the 2009 sampling for this project, the small scars left when fragments were removed from a parent colony had completely healed over three weeks later. The protocols used in this project should ensure that there are no short term or long term effects on the cultural historic resources of the Monument, which will remain intact and essentially unchanged.

c. Is there a practicable alternative to conducting the activity within the Monument? If not, explain why your activities must be conducted in the Monument.

As noted in the Proclamation, the Monument is home to thousands of species, many of which may not be found anywhere else on Earth. Every effort will be made to collect the majority of the specimens needed from the local waters of the Main Hawaiian Islands, but it simply is not possible to collect all the specimens we will need around these islands. In addition to this, the stress placed on fish populations and ecosystems of the NWHI, where these fish are relatively common, would be insignificant or undetectable. This is in stark contrast to the high stress that collection would place on fish populations in the Main Hawaiian Islands, where these animals are uncommon and whose continued survival there is uncertain. As such, the probability of a rapid and successful population replenishment following removal of a small number of specimens

is almost assured in the waters of the Monument, but highly uncertain in the waters of the Main Hawaiian Islands.

d. How does the end value of the activity outweigh its adverse impacts on Monument cultural, natural and historic resources, qualities, and ecological integrity?

The minimal and brief effect this activity might have pales in comparison to the benefits it brings to the Monument. The Waikiki Aquarium is world renowned for its ability to recreate ecologically accurate and realistic exhibits of marine habitats. For visitors, being able to actually "see" a part of the Monument through the NWHI exhibit would do much more to interest and educate them than any book or video. Having live animals that most people will never get to see in their lifetimes in their natural environment, separated from them by only a thin sheet of acrylic, is guaranteed to grab the viewer's attention and stimulate their interest. By viewing the exhibit and the associated graphic and video education presentations, the public will develop an appreciation of the importance of the Papahānaumokuākea Marine National Monument and the need to preserve it for future generations. Lastly, interactive touchscreens associated with the exhibit will enhance this appreciation by providing information on the cultural importance of the islands, their natural resources and their ecology, and provide visitors an insight into the significance of our country's largest Marine National Monument.

e. Explain how the duration of the activity is no longer than necessary to achieve its stated purpose.

We are proposing from one to three trips to the Monument during this period of time to complete this project. Each trip would last approximately one to four weeks. The timing of each trip may be dependent on the availability of flights to and from Midway Atoll and the timing of the Hi'ialakai NOAA vessel (or other support vessels) being in close proximity. For SCUBA operations based out of Midway Atoll, dives would likely take place over a 3-4 day period during that time in which the support vessel is in close proximity, with snorkeling excursions being performed as needed. GPS locations may be used to pinpoint areas previously surveyed and known to be home to the target fish and/or coral species. This information will help reduce the amount of exploratory diving and sailing that would ordinarily need to be done, thereby maximizing the efficiency of the collection process and reducing the duration of the time needed within the Monument.

f. Provide information demonstrating that you are qualified to conduct and complete the activity and mitigate any potential impacts resulting from its conduct.

The Waikiki Aquarium has been involved in many fish and coral collection activities over several decades, often as the lead organization. It is internationally renowned for its expertise and successes in collecting, maintaining, exhibiting, breeding and propagating many uncommon, new, and sometimes protected or endangered organisms. Education, research and conservation are the three activities underpinning the Aquarium's mission, and wherever we collect specimens, extreme care is taken to ensure that minimal, if any, environmental impact results from our collecting activities. This standard operating protocol is especially relevant in the pristine NWHI ecosystem.



Coral propagation is the forte of the Waikiki Aquarium, which has successfully maintained live corals since 1978. It now houses the largest and oldest collection of corals in the United States and is internationally renowned as a leader in this field. The objective of the Aquarium's Coral Farm program is to propagate corals to provide specimens to researchers and other public aquariums worldwide. Each year this program distributes approximately 1,000 fragments of coral. In this manner these organizations will not have to source corals from living reefs, thereby reducing collection pressures.

The Aquarium's newly established Hawaiian Coral Ark program seeks to propagate uncommon Hawaiian corals, with the ultimate objective of conserving them in captivity until they can be reintroduced into the wild. It is planned to expand this program to include all threatened or endangered Hawaiian corals, and also other rare Pacific corals. Notable species housed here currently include the endemic rice coral *Montipora dilatata*, collected in 2000 as fragments from the three known remaining colonies in Kaneohe Bay, and fragments of *Acropora cytherea*, which were collected in 2007 off Kauai from the only known colony of this coral there. For both these species, propagation efforts on the fragments originally collected have been extremely successful: the original pieces have grown to the extent that they themselves have been subdivided into new fragments for propagation. The 20 live coral pieces received from the NWHI in October 2009, and 75 live coral pieces collected in October 2010, have temporarily been placed into this holding system and have become established and are growing well in this system, and will all be placed into the NWHI exhibit as soon as the display is stabilized and ready for corals. Lastly, it should be noted that corals in both these programs also represent a genetic depository that researchers can use, without affecting naturally occurring corals on reefs.

The corals collected from the PMNM are intended for use within the new NWHI exhibit, but the possibility does exist that some of the corals will be fragmented from the exhibit, and placed into a holding system to serve primarily as a backup in the unlikely scenario that there are significant coral losses in the main NWHI exhibit in which case we can replenish the exhibit with corals from this holding system.

To this day, we maintain a prized collection of very uncommon Hawaiian marine organisms including, but not limited to: Hawaiian Monk Seals; the only known specimens of the Masked Angelfish *Genicanthus personatus* in public aquaria within the United States (we also have the only the only known record of breeding this species); several species of *Leptoseria*, the deepest known photosynthetic corals; and an extensive list of uncommon fishes and invertebrates which are not exhibited anywhere else.

g. Provide information demonstrating that you have adequate financial resources available to conduct and complete the activity and mitigate any potential impacts resulting from its conduct. The Waikiki Aquarium has several sources of finance to draw upon to adequately fund this activity; financial support from NOAA, NMFS, Friends of the Waikiki Aquarium (FOWA) will support this activity.

h. Explain how your methods and procedures are appropriate to achieve the proposed activity's goals in relation to their impacts to Monument cultural, natural and historic resources, qualities, and ecological integrity.

The Waikiki Aquarium has had years of experience working with and employing biologists who are extremely skilled in collecting a variety of organisms. This wealth of experience and expertise enables them to use non-lethal and non-destructive fishing practices which ensure that the animals collected are treated with the greatest care possible and that the environment they are removed from is not harmed in the process.

Whenever possible or preferred, shore-based dives/snorkeling will be used to prevent any additional disturbance that may be caused by a small boat/vessel. When shore-based dives and snorkeling are not an option, a small boat/vessel may be used. The impact on the natural resources of the Monument will be minimized by selecting specimens which are easily replenished or can regrow with a minimal amount of time and/or energy. Juvenile fishes will be collected when possible, thus preventing the taking of larger, sexually mature specimens, whose reproductive efforts serve to replenish populations. Whenever possible, collected coral fragments will consist of naturally detached fragments. When naturally occurring fragments are not available, small fragments may be removed directly from parent colonies, and if/when this is done, it will be in a manner that will not affect the long-term growth of the coral. The success of this approach can be evaluated from the observation that the small scars left when fragments were removed from a parent colony as part of the 2009 project had completely healed over three weeks later. If coral fragments are taken directly from parent colonies, several different colonies may be used to prevent any one coral from becoming too stressed. Waikiki Aquarium biologists are highly experienced and competent in this technique. The minimum number of organisms needed will be removed through this activity, and those that are removed will be selectively chosen, thereby avoiding the unnecessary physical damage and death that often occurs to specimens that are captured incidentally as bycatch. While a small number of natural resources (i.e. fishes and corals) will be removed from the Monument, the effect will be short term only; the lasting effect of their removal will be invisible and the cultural, natural and historic resources, and ecological integrity of the Monument will remain intact.

i. Has your vessel has been outfitted with a mobile transceiver unit approved by OLE and complies with the requirements of Presidential Proclamation 8031?  
NOAA vessels are equipped with the NOAA OLE Monitoring System

j. Demonstrate that there are no other factors that would make the issuance of a permit for the activity inappropriate.

There are no other factors that would make the issuance of a permit for the activity inappropriate.

## **8. Procedures/Methods:**

Midway Atoll Collection Sites: Waikiki Aquarium/NOAA staff

Collection sites will be reached via SCUBA-assisted or snorkel-assisted shore dives or by use of small boat/vessel. Extreme care will be taken to ensure ecologically or culturally sensitive areas

are not disturbed during our activities. To minimize the amount of exploratory diving within the Monument, previously visited dive/collection sites will be utilized. GPS locations have been previously recorded in areas known to contain certain desired specimens and will be used to locate some of these sites.

Non-destructive and non-lethal collection techniques with which Waikiki Aquarium staff are very well acquainted with will be used. Collecting tools including hand-nets, barrier nets, geological picks, small hand tools such as chisels and wire cutters, fish keeps, various small collecting containers, and mesh collection bags will be used for the collection of fish and corals. Fish may be placed in various keeps and will be gradually raised through the water column. Procedures with which Aquarium staff are experienced in will be used to acclimate fish from deeper locations to more shallow depths to prevent the onset of barotrauma. Fish may be fasted as they are collected in keeps, specialized containers suspended in the harbor at Midway Atoll of from an offshore float, or within designated holding systems either on the vessel or onshore at Midway. This temporary fasting will facilitate the desired conditions for shipping and lessen the likelihood of water fouling in the bags during transit.

If possible, fish and/or corals may be shipped via aircraft back to Honolulu. Fish will be packaged in individual bags about 1/3 full of seawater; several fragments of coral may be packaged together or individually based on fragment/colony size. Once placed in bags, all excess air will be removed from the bag and oxygen will be pumped into the bag until full. All fish will be double bagged and banded to prevent accidental puncture or collapse of the bag. Bags will then be placed into styrofoam boxes with plastic liners, and heat packs will be secured to the inside lids of the boxes (if necessary) to maintain proper temperatures within the boxes. The styrofoam boxes will be placed within cardboard boxes, sealed, and be ready for transit.

If shipping via aircraft is possible, coral fragments collected from Midway Atoll will be placed either in keeps nearshore or in areas of reduced turbulence where they can be easily gathered for packaging and transit, or in designated holding systems on the vessel or onshore at Midway. The number of coral fragments per bag will depend on the size and quantity of the fragments. Plastic strips will be wrapped around the corals to provide cushioning from the vibrations of transit and to prevent individual fragments from contacting each other. In addition, plastic strips will line the insides of each bag to further prevent damage to individual fragments and also to prevent puncturing of the bags. Corals will be bagged according to genus/species, with different corals being packaged separately. Sufficient seawater will be placed in each bag to cover the corals, then the excess air will be removed and the bag refilled with oxygen until full. All corals will be double bagged and banded to prevent puncture or collapse of the bag. All bagged corals will be placed into styrofoam boxes with plastic liners, and heat packs will be secured to the inside lids of the boxes (if necessary) to maintain proper temperatures within the boxes. The styrofoam boxes will be placed within cardboard boxes, sealed, and be ready for transit.

Other islands/collection sites outside of the Midway Atoll waters: Various Collectors (TBD)

Collection divers from various agencies (including but not limited to FWS, NOAA, Bishop Museum) may be used to collect various fish/corals not found within the marine habitats

surrounding Midway Atoll when Waikiki Aquarium staff are not present. Target species of coral include those which are uncommon or absent from the Main Hawaiian Islands, or those which cannot be visually identified and/or may represent new geographic records or new species. The priority should remain on collecting small (5-15 cm) naturally dislodged coral fragments of these corals. If fragments are to be taken directly from parent colonies, these fragments should be removed in a manner which is least invasive and minimizes the long term affect on the coral's growth. Only corals exhibiting excellent health characteristics will be collected. Coral which appears to be unhealthy or diseased will not be collected. Coral fragments can be brought to the water surface via collection bags or specialized keeps where they will then be maintained aboard the Hi'ialakai or other support vessels (TBD). Coral fragments will be placed into specialized holding tanks or coolers aboard the vessel. Extreme care will be taken to follow the protocols established by the Monument concerning the discharge of water from these holding tanks/coolers. When possible, the total volume of water within these holding tanks/coolers should be exchanged a two times per day while within the Monument, or as deemed necessary by water quality assessments. Discharge water will drain into the ballast tanks (or other marine sanitation device) of the vessel during this time. Once outside the SPA's, an open, flow-through type circulation would be preferred (if possible). If Waikiki Aquarium staff or their designee(s), are present at Midway Atoll around the same time that the Hi'ialakai will be in the vicinity, it would be ideal for them to receive any fish/corals collected at the beginning of the trip which were being maintained aboard the vessel so these could be shipped via air transit back to the Waikiki Aquarium. These fish/corals would be prepared for shipping as described above. This would allow for room for additional fish/corals to be collected on the return trip (if needed) and these specimens could be transported via ship under the protocols of water exchanges described above.

Fish/corals will not be disposed of once collected and placed into holding aboard the vessel(s). Any fish/corals that become diseased during transit, or which die, will be retained and properly quarantined/preserved as stated by guidelines set forth by the Monument. The Waikiki Aquarium staff is continuing to work with Monument officials to ensure all fish and coral collection/transportation guidelines are met and followed.

**NOTE: If land or marine archeological activities are involved, contact the Monument Permit Coordinator at the address on the general application form before proceeding, as a customized application will be needed. For more information, contact the Monument office on the first page of this application.**

**9a. Collection of specimens - collecting activities (would apply to any activity): organisms or objects (List of species, if applicable, attach additional sheets if necessary):**

See attached "species collection list"

Common name:

Scientific name:

# & size of specimens:

Collection location:

☐ Whole Organism ☐ Partial Organism

**9b. What will be done with the specimens after the project has ended?**

The intent of this project is to bring the specimens collected back to the Waikiki Aquarium, University of Hawaii at Manoa, where they will be placed in dedicated quarantine systems and eventually on display. Once through the quarantine process and treated successfully for any diseases or ailments they might have, they will be placed in the new 5,000 gallon NWHI educational display, and other associated propagation systems at the Aquarium.

**9c. Will the organisms be kept alive after collection?** ☒ Yes ☐ No

• Specific site/location:

Gallery 4-1/ Northwestern Hawaiian Islands Exhibit-Waikiki Aquarium

• Is it an open or closed system? ☐ Open ☒ Closed

• Is there an outfall? ☒ Yes ☐ No

The outfall disposes of system water only during periodic scheduled water exchanges or flushing procedures. This discharge water enters a sanitary sewer line and does not flow untreated to the ocean.

• Will these organisms be housed with other organisms? If so, what are the other organisms?  
Yes; See attached "exhibit species list"

• Will organisms be released?

No

**10. If applicable, how will the collected samples be transported out of the Monument?**

Fish and corals will be carefully boxed then transported by plane out of Midway Atoll when possible. In addition to these fish and corals, some specimens may be transported via vessel (ie. Hi'ialakai) back to Honolulu. (see 8.Procedures/Methods for further details)

**11. Is your proposed activity based on a State Department of Education Standards Based Curriculum? If so, describe:**

N/A

**12. If applicable, describe how you are collaborating with others in any way to reduce duplicative activities in the Monument or elsewhere?**

In addition to the organisms being collected for display at the Waikiki Aquarium, we will be working closely with NOAA staff in a collaborative effort to collect organisms also for an educational display in the NOAA Mokupapapa Discovery Center in Hilo, HI. Waikiki Aquarium staff/designees and NOAA staff will partner up to assist each other in their collecting efforts; this will avoid replication and unnecessary additional disturbance at the collecting sites.

**13. What materials, products or deliverables will be developed as a result of your proposed activity? Provide a time line for write-up and publication of information or production of educational materials:**

The Waikiki Aquarium is world renowned for its ability to recreate ecologically accurate and realistic exhibits of marine habitats. For its 320,000 annual visitors, the experience of "seeing" a part of the Monument through the NWHI exhibit would do much more to interest and educate them than any book or video. Having live animals that most people will never get to see in their lifetimes in their naturalistic environment, separated from them by only a thin sheet of acrylic, is guaranteed to grab guests' attention and stimulate their interest. This ecologically accurate exhibit and associated graphic and video educational messaging will result in increased public awareness of the Monument, and the public will develop an appreciation of the importance of the Papahānaumokuākea Marine National Monument and the need to preserve it for future generations. Additionally, our education programs, which reach over 32,000 schoolchildren annually, will be revised to incorporate accurate scientific and cultural information about the Monument, using the exhibit as a dynamic living tool to underline the education and conservation message. Lastly, interactive touchscreens associated with the exhibit will enhance this appreciation by providing information on the cultural importance of the islands, their natural resources and their ecology, and provide visitors an insight into the significance our country's largest Marine National Monument. The proposed opening of this exhibit is early Spring 2011.

**14. List all specialized gear and materials to be used in this activity:**

Collecting gear would include, but not be exclusive to, SCUBA gear, monofilament handnets, monofilament barrier fence nets, mesh bags, hypodermic needles used for prevention of barotrauma in collected fish, various sized holding containers for fishes and coral, geological picks, and various hand held tools. Holding tanks may consist of collapsible "kiddie" pools modified to our uses, coolers, various water pumps and air pumps that may be portable or "fixed". Other specialized gear would be shipping materials to transport the organisms. These would be plastic bags of various sizes, insulated boxes consisting of styrofoam and cardboard, rubberbands, packing tape, and oxygen bottle(s).

**15. List all Hazardous Materials you propose to take to and use within the Monument:**

N/A

**16. Describe any fixed installations and instrumentation proposed to be set in the Monument:**

N/A

**17. List all Applicants' publications/references directly related to the proposed project:**

Press release: [http://papahanaumokuakea.gov/PDFs/nr\\_coral\\_arrival\\_final.pdf](http://papahanaumokuakea.gov/PDFs/nr_coral_arrival_final.pdf)

Television newscast/web article: <http://www.hawaiinewsnow.com/Global/story.asp?S=11401255>

Magazine article: <http://www.honolulumagazine.com/Honolulu-Magazine/January-2010/The-Waikiki-Aquarium-039s-Coral-Collection/>

With knowledge of the penalties for false or incomplete statements, as provided by 18 U.S.C. 1001, and for perjury, as provided by 18 U.S.C. 1621, I hereby certify to the best of my abilities under penalty of perjury of that the information I have provided on this application form is true and correct. I agree that the Co-Trustees may post this application in its entirety on the Internet. I understand that the Co-Trustees will consider deleting all information that I have identified as "confidential" prior to posting the application.

---

Signature

Date

**SEND ONE SIGNED APPLICATION VIA MAIL TO THE MONUMENT OFFICE BELOW:**

Papahānaumokuākea Marine National Monument Permit Coordinator  
6600 Kalaniana'ole Hwy. # 300  
Honolulu, HI 96825  
FAX: (808) 397-2662

**DID YOU INCLUDE THESE?**

- ☒ Applicant CV/Resume/Biography
- ☒ Intended field Principal Investigator CV/Resume/Biography
- ☒ Electronic and Hard Copy of Application with Signature
- ☐ Statement of information you wish to be kept confidential
- ☐ Material Safety Data Sheets for Hazardous Materials



## **Papahānaumokuākea Marine National Monument Compliance Information Sheet**

### **1. Updated list of personnel to be covered by permit. List all personnel names and their roles here (e.g. John Doe, Diver; Jane Doe, Field Technician, Jerry Doe, Medical Assistant):**

- Richard Klobuchar, Jr.: Aquarium Biologist/Scientific Diver/Fish and Invertebrate Specialist, Waikiki Aquarium-University of Hawaii (Manoa)
- Richard Pyle, Ph.D: Associate Zoologist, Database Coordinator, Bishop Museum
- Daniel Wagner, Research Specialist, NOAA PMNM,
- Anthony Montgomery, Marine Biologist, USFWS, (Diver)
- Robert Whitton, Ichthyologist, Bishop Museum (Diver)
- John Earle, Research Associate/Exploration Diver, Bishop Museum(Diver)

### **2. Specific Site Location(s): (Attach copies of specific collection locations):**

- N28 15.187 W177 23.409 Midway Island- Lagoon
- N28 14.585 W177 22.000 Midway Island- Lagoon
- N28 14.541 W177 21.809 Midway Island- Lagoon
- N28 14.435 W177 22.059 Midway Island- Lagoon
- N28 11.983 W177 20.797 Midway Island- Channel
- N28 14.536 W177 22.396 Midway Island- Lagoon
- N28 24.540 W178 20.484 Kure Atoll- Coral Gardens
- N28 23.422 W178 21.804 Kure Atoll- Channel
- N23 46.108 W166 15.624 French Frigate Shoals- Le Perouse
- N23 46.184 W166 15.741 French Frigate Shoals- Le Perouse
- N23 46.974 W166 19.416 French Frigate Shoals
- N23 50.214 W166 15.961 French Frigate Shoals
- N23 50.907 W166 17.215 French Frigate Shoals
- N23 39.344 W166 04.761 French Frigate Shoals "horn coral" location
- N23 39.654 W166 15.066 French Frigate Shoals
- N23 39.554 W166 12.481 French Frigate Shoals
- N23 38.105 W166 11.142 French Frigate Shoals- Rapture Reef

### **3. Other permits (list and attach documentation of all other related Federal or State permits):**

- Papahānaumokuākea Marine National Monument, Education Permit (Rossiter PMNM-2010-023...exp 12/31/10)
- State of Hawaii, Dept. of Agriculture, Restricted Import Permit-Fish and Inverts, #12-02-O-A4507, issued February 22, 2011
- State of Hawaii, Dept. of Agriculture, Conditional Import Permit-Fish and Inverts, #12-02-O-A4506, issued February 22, 2011
- Department of Land & Natural Resources, DAR, Special Activity Permit, Reef and freshwater fishes and invertebrates, #2011-15, exp. 5/1/2012

**3a. For each of the permits listed, identify any permit violations or any permit that was suspended, amended, modified or revoked for cause. Explain the circumstances surrounding the violation or permit suspension, amendment, modification or revocation.**

- n/a

**4. Funding sources (Attach copies of your budget, specific to proposed activities under this permit and include funding sources. See instructions for more information):**

- FOWA (Friends of Waikiki Aquarium) Fund
- State of Hawaii/University of Hawaii (Manoa) Foundation Funds

**5. Time frame:**

Activity start: 8/29/11

Activity completion: 9/22/11

Dates actively inside the Monument:

- From: 9/1/11
- To: 9/20/11

Describe any limiting factors in declaring specific dates of the proposed activity at the time of application:

- There are no known limiting factors at this point in time other than the permit approval, which is still pending.

Personnel schedule in the Monument:

- Richard Pyle, Daniel Wagner, Anthony Montgomery  
From: 9/1/11 (approximate entry date into the Monument)  
To: 9/20/11 (approximate exit date from the Monument)
- Richard Klobuchar, Jr.

From: 9/8/11 (flight into Midway)

To: 9/20/11 (approximate exit date from the Monument)

**6. Indicate (with attached documentation) what insurance policies, bonding coverage, and/or financial resources are in place to pay for or reimburse the Monument trustees for the necessary search and rescue, evacuation, and/or removal of any or all persons covered by the permit from the Monument:**

- UH Scientific Dive Certified, Workers Compensation w/ University of Hawaii (Manoa)-First Insurance Company of Hawaii, Ltd.

**7. Check the appropriate box to indicate how personnel will enter the Monument:**

☒ Vessel

☒ Aircraft

Provide Vessel and Aircraft information:

- Richard Pyle, Daniel Wagner, Anthony Montgomery will enter the Monument by NOAA Vessel HI'IALAKAI
- Richard Klobuchar, Jr. will enter the Monument by Aircraft (Asheville Jet Flights, Gulf Stream IISP N227LA Aircraft, Asheville G2B-FWS 35, Sept 8, 2011, 0800)

**8. The certifications/inspections (below) must be completed prior to departure for vessels (and associated tenders) entering the Monument. Fill in scheduled date (attach documentation):**

Rodent free, Date:

Tender vessel, Date:

Ballast water, Date:

Gear/equipment, Date:

Hull inspection, Date:

**9. Vessel information (NOTE: if you are traveling aboard a National Oceanic and Atmospheric Administration vessel, skip this question):**

Vessel name:

Vessel owner:

Captain's name:

IMO#:

Vessel ID#:

Flag:

Vessel type:

Call sign:

Embarkation port:

Last port vessel will have been at prior to this embarkation:

Length:

Gross tonnage:

Total ballast water capacity volume (m3):

Total number of ballast water tanks on ship:

Total fuel capacity:

Total number of fuel tanks on ship:

Marine Sanitation Device:

Type:

Explain in detail how you will comply with the regulations regarding discharge in the Monument. Describe in detail. If applicable, attach schematics of the vessel's discharge and treatment systems:

Other fuel/hazardous materials to be carried on board and amounts:

Provide proof of a National Oceanic and Atmospheric Administration (NOAA) Office of Law Enforcement-approved Vessel Monitoring System (VMS). Provide the name and contact information of the contractor responsible for installing the VMS system. Also describe VMS unit name and type:

VMS Email:

Inmarsat ID#:

\* Individuals MUST ENSURE that a type-approved VMS unit is installed and that its automatic position reports are being properly received by the NOAA OLE system prior to the issuance of a permit. To make sure your VMS is properly configured for the NOAA OLE system, please contact NOAA OLE at (808) 203-2503 or (808) 203-2500.

\* PERMITS WILL NOT BE ISSUED TO INDIVIDUALS ENTERING THE MONUMENT VIA VESSEL UNTIL NOAA OLE HAS CONTACTED THE MONUMENT PERMIT COORDINATOR WITH A 'POSITIVE CHECK' READING.

#### **10. Tender information:**

On what workboats (tenders) will personnel, gear and materials be transported within the Monument? List the number of tenders/skiffs aboard and specific types of motors:

- Waikiki Aquarium staff will be transported within the Monument via the HI'IALAKAI and/or its associated dive/workboats which will be operated by HI'IALAKAI staff.

### **Additional Information for Land Based Operations**

#### **11. Proposed movement of personnel, gear, materials, and, if applicable, samples:**

- Most gear will be transported via vessel (Hi'ialakai). Items which cannot be transported via air (ie. O2 bottles), will be transported via vessel (Hi'ialakai) where it will be maintained until the completion of the cruise/collection activities. A certified small boat operator (HI'IALAKAI staff) will be assisting in field operations.

## **12. Room and board requirements on island:**

- Waikiki Aquarium staff (x1) will be using accommodations aboard the Hi'ialakai for the second half of August/September cruise starting September 10<sup>th</sup>, and will only need room and board accommodations on Midway for the nights of September 8<sup>th</sup>, and 9<sup>th</sup>.

## **13. Work space needs:**

- Freshwater access will be necessary for rinsing dive/snorkel gear, cameras, regulators, collecting tools, and will be hung to dry for the next day's use. Water will drain onto ground around rinsing stations. Electrical access for charging of cameras, GPS equipment, etc would be desired, and could be satisfied by the use of a couple wall plugs/outlets..

DID YOU INCLUDE THESE?

Map(s) or GPS point(s) of Project Location(s), if applicable

Funding Proposal(s)

Funding and Award Documentation, if already received

Documentation of Insurance, if already received

Documentation of Inspections

Documentation of all required Federal and State Permits or applications for permits



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
DIVISION OF AQUATIC RESOURCES  
1151 PUNCHBOWL STREET, ROOM 330  
HONOLULU, HAWAII 96813

WILLIAM J. AILA, JR.  
CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE MANAGEMENT

GUY KAULUKUKUI  
FIRST DEPUTY

WILLIAM M. TAM  
DEPUTY DIRECTOR - WATER


AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
BUREAU OF CONVEYANCES  
COMMISSION ON WATER RESOURCE MANAGEMENT  
CONSERVATION AND COASTAL LANDS  
CONSERVATION AND RESOURCES ENFORCEMENT  
ENGINEERING

FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
KAHOOLAWE ISLAND RESERVE COMMISSION  
LAND  
STATE PARKS

August 12, 2011

TO: Division of Aquatic Resources File

THROUGH: William J. Aila, Jr., Chairperson

FROM:  Francis Oishi  
Division of Aquatic Resources

SUBJECT:

DECLARATION OF EXEMPTION FROM THE PREPARATION OF AN ENVIRONMENTAL ASSESSMENT  
UNDER THE AUTHORITY OF CHAPTER 343, HRS AND CHAPTER 11-200 HAR, FOR  
PAPAHĀNAUMOKUĀKEA MARINE NATIONAL MONUMENT EDUCATION PERMIT TO DR.  
ANDREW ROSSITER, UNIVERSITY OF HAWAII, WAIKIKI AQUARIUM, FOR ACCESS TO STATE  
WATERS TO CONDUCT CORAL AND FISH COLLECTION ACTIVITIES UNDER PERMIT PMNM-2011-  
026.

The following permitted activities are found to be exempted from preparation of an environmental assessment under the authority of Chapter 343, HRS and Chapter 11-200, HAR:

Project Title:

Papahānaumokuākea Marine National Monument Education Permit to Dr. Andrew Rossiter, University of Hawaii, Waikiki Aquarium, for Access to State Waters to Conduct Coral and Fish Collection Activities

Permit Number: PMNM-2011-026

Project Description:

The education permit application, as described below, would allow entry and activities to occur in Papahānaumokuākea Marine National Monument (Monument), including the NWHI State waters from August 25, 2011 through December 31, 2011.

This is an effort to collect live coral and fish from Papahānaumokuākea Marine National Monument, to be maintained and put on public display in a new exhibit at the Waikiki Aquarium highlighting the fauna and ecosystem of the Northwestern Hawaiian Islands.

The proposed activities are in direct support of the Monument Management Plan's Ocean Ecosystems Literacy action plan (3.5.2) and Constituency Building and Outreach action plan

August 12, 2011

Page 2

(3.5.4). These action plans include efforts to develop and implement new tools to “bring the place to the people” and to increase public understanding of the Monument. Activities to support public outreach and education of the NWHI are addressed in the Monument Management Plan Environmental Assessment (December 2008) which resulted in a FONSI. This EA summarizes that activities to support outreach would have a beneficial effect on all natural resources in the Monument (PMNM MMP Vol. 2, p. 187). These proposed collections and their inclusion in aquarium exhibits would enhance public understanding of Monument resources.

Consulted Parties:

The permit application was sent out for review and comment to the following scientific and cultural entities: Hawaii Division of Aquatic Resources, Hawaii Division of Forestry and Wildlife, Papahānaumokuākea Marine National Monument (NOAA/NOS), NOAA Pacific Islands Regional Office (NOAA-PIRO), United States Fish and Wildlife Service Hawaiian and Pacific Islands National Wildlife Refuge Complex Office, and the Office of Hawaiian Affairs (OHA). In addition, the permit application has been posted on the Monument Web site since March 10th, giving the public an opportunity to comment. The application was posted within 40 days of its receipt, in accordance with the Monument’s Public Notification Policy.

Exemption Determination:

After reviewing HAR § 11-200-(8), including the criteria used to determine significance under HAR § 11-200-12, DLNR has concluded that the activities under this permit would have minimal or no significant effect on the environment and that issuance of the permit is categorically exempt from the requirement to prepare an environmental assessment based on the following analysis:

1. All activities associated with this permit, including live coral and fish collections, have been evaluated as a single action. As a preliminary matter, multiple or phased actions, such as when a group of actions are part of a larger undertaking, or when an individual project is precedent to or represents a commitment to a larger project, must be grouped together and evaluated as a single action. HAR § 11-200-7. This permit does not involve an activity that is precedent to a later planned activity.

2. The Exemption Class for Scientific Research with no Serious or Major Environmental Disturbance Appears to Apply. Chapter 343, HRS, and § 11-200-8, HAR, provide for a list of classes of actions exempt from environmental assessment requirements. HAR §11-200-8.A.5. exempts the class of actions which involve “basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource.” This exemption class has been interpreted to include “collection, culture and captive propagation of aquatic biota”, such as those being proposed.

The proposed collection activities here appear to fall squarely under the exemption class #5, exempt item #5 as described under the former Fish and Game Division exemption list published in January 19, 1976. As discussed below, no significant disturbance to any environmental resource is anticipated in the sampling of Monument resources. Thus, so long as the below considerations are met, an exemption class should include the action now contemplated.

3. Cumulative Impacts of Actions in the Same Place and Impacts with Respect to the Potentially Particularly Sensitive Environment Will Not be Significant. Even where a categorical exemption

appears to include a proposed action, the action cannot be declared exempt if “the cumulative impact of planned successive actions in the same place, over time, is significant, or when an action that is normally insignificant in its impact on the environment may be significant in a particularly sensitive environment.” HAR § 11-200-8.B. To gauge whether a significant impact or effect is probable, an exempting agency must consider every phase of a proposed action, any expected primary and secondary consequences, the long-term and short-term effects of the action, the overall and cumulative effect of the action, and the sum effects of an action on the quality of the environment. HAR § 11-200-12. Examples of actions which commonly have a significant effect on the environment are listed under HAR § 11-200-12.

No prior projects of this type have been undertaken to date. The activities would be a continuation and expansion of work previously conducted by the applicant. While other permits allow for the collection of several of the same species, the numbers requested are limited. Up to 136 samples of 30 coral species, and up to 53 specimens of 12 fish species would be collected. Collections would be non-lethal and non-destructive. With this in mind, significant cumulative impacts are not anticipated as a result of this activity, and numerous safeguards further ensure that the potentially sensitive environment of the project area will not be significantly affected. All activities will be conducted in a manner compatible with the management direction of the Monument Proclamation in that the activities do not diminish monument resources, qualities, and ecological integrity, or have any indirect, secondary, cultural, or cumulative effects. The joint permit review process did not reveal any anticipated indirect or cumulative impacts, nor did it raise any cultural concerns, that would occur as a result of these activities.

The activities would be conducted from the NOAA Ship HI'IALAKAI (PMNM-2011-009) during its September cruise. The following table lists additional activities that are anticipated to take place on this cruise pending approval of permit applications.

**Table 1. Concurrent Projects Aboard NOAA SHIP HI'IALAKAI**

Permit	Purpose and Scope	Location
PMNM-2011-009 NOAA Ship HI'IALAKAI	The permit allows NOAA Ship HI'IALAKAI entry into PMNM. Personnel aboard the vessel will be permitted under separate permits.	All locations
PMNM-2011-018 Meyer (proposed)	The proposed action is to allow collection of reef fish and tagging of top predators as well as acoustic receiver deployment	All locations
PMNM-2011-019 Valenzuela (proposed)	The proposed action is to allow filming activities for use on public television stations	All locations
PMNM-2011-026 Rossiter (proposed)	The proposed action is to allow collection of live coral and fish.	All locations
PMNM-2011-038 Nakamoto (proposed)	The proposed action is to allow filming for Hawaii Skin Diver publications	All locations



PMNM-2011-42 Kosaki (proposed)	The proposed action is to allow collection of unidentifiable specimens located on deep reefs	All locations
PMNM-2011-025 Bowen (proposed)	The proposed action is to allow collection of specific reef fish, invertebrate and algal species	All locations
PMNM-2011-024 Gleason (proposed)	The proposed action is to survey and monitor maritime heritage sites.	All locations
PMNM-2011-030 Lemus (proposed)	The proposed action is to allow filming and photography for the development of undergraduate curriculum.	All locations

Although this is one of four proposed projects that include the collection of either corals or fish, it is the only proposed activity that is requesting the collection of live coral and live fish for the purpose of educating the public. The three other proposed activities occurring during this Applicant's collection timeline that also request collections from these taxonomic groups are as follows, Meyer (PMNM-2011-018), Bowen (PMNM-2011-025), and Kosaki (PMNM-2011-042). Each of these three other proposed projects are requesting either voucher specimens, whole lethal collections, or smaller tissue samples for research purposes and thus do not overlap with either Rossiter's scope of work or purpose. It is possible that Meyer would collect Thompson's Anthias, a species also on Rossiter's list, if Meyer determines in the field that this fish is one of the three most common at mesophotic depths (>30 meters) at his FFS and P&H transect sites. If Meyer did collect this fish, it would be a lethal collection for research purposes and again would not overlap with the purpose and scope of Rossiter's live collection of this fish for educational display. None of the other three proposed projects would overlap with any of the species Rossiter is proposing to collect. Kosaki is requesting voucher specimens and at first glance could overlap with this Applicant who is also requesting coral vouchers, but both projects would be occurring in different depths, so overlap would be highly unlikely. In addition, voucher collections are under strict guidelines set forth by Monument managers which limit both size and amount; therefore any unforeseen duplication would be overall very minimal. Bowen is requesting a rice grain size sample from corals for genetic analysis and whole lethal fish collections. There are no fish species proposed on Bowen's project which overlap with that of Rossiter's, and hence no duplicate sampling is foreseen.

The culmination of these permits, and their disparate activities, occurring throughout the Monument over a 4-week period, is not anticipated to have significant cumulative impacts. The NOAA Ship OSCAR ELTON SETTE (PMNM-2011-008) may also be in the Monument during this time frame facilitating needs of the monk seal camps under the management permit (PMNM-2011-001).

Since no significant cumulative impacts or significant impacts with respect to any particularly sensitive aspect of the project area are anticipated, the categorical exemptions identified above should remain applicable.

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4. Overall Impacts will Probably be Minimal and Insignificant.

Again, any foreseeable impacts from the proposed activity will probably be minimal, and further mitigated by general and specific conditions attached to the permit. Specifically, all research activities covered by this permit will be carried out with strict safeguards for the natural, historic, and cultural resources of the Monument as required by Presidential Proclamation 8031, other applicable law and agency policies and standard operating procedures.

Conclusion. Upon consideration of the permit to be approved by the Board of Land and Natural Resources, the potential effects of the above listed project as provided by Chapter 343, HRS and Chapter 11-200 HAR, have been determined to be of probable minimal or no significant effect on the environment and exempt from the preparation of an environmental assessment.

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William J. Aila, Jr.  
Chairperson, Board of Land and Natural Resources

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Date